

PFAS TREATMENT - UNIT P1



The P1 Unit is a cartridge-based filtration system that houses twelve separate stages. When employed to treat PFAS-impacted waters, each stage has a specific role, and broadly speaking the stages can be split into two categories:

MyCelx infused cartridges that target specific organic compounds which, when applied in series, can remove a full spectrum of emulsions, semi-volatile compounds, water-soluble organics and PFAS. These active cartridges represent 90% of the initial consumables cost.

Sediment cartridges are present in a range of pore sizes and exist to protect the active filters from suspended solids. The sediment cartridges are relatively cheap, and are preferentially fouled and replaced as necessary, leaving the more expensive, active filters to focus on the task of removing organic compounds.

In a PFAS treatment scenario, Unit P1 will remove the majority of PFAS from the treated waters, and Unit P2 will act to polish and remove contaminants to meet higher protection limits. In general the PFAS treatment modules would be employed after some pre-treatment to remove gross contaminants like suspended solids and dissolved metals. This is to cut down on consumables use and plant downtime associated with cartridge swaps

TECHNICAL SPECIFICATIONS

Dimensions (mm)	6000L x 2400W x 2900H
Gross Weight	4500kg
Consumables	40" Cartridges. Approx \$38,400 for a full complement of filters
Optimum Flow	7.5-10 L/s
Max. Flow	10 L/s
Containment	Standard 20' shipping container
Operating System	Single phase 10A power supply. Pressure sensors for remote monitoring of vessel pressure drops.

KEY FEATURES

- Simple to use
- Remote monitoring of system pressures to observe filter condition
- Low power requirement
- Potentially high consumables cost so correct water analysis and pre-treatment specification is essential.

